

Episode 56iO September 12, 2023. In England, a cross party demand for a Clean Air (PM2.5) Bill. PM2.5 and breast cancer.

England

September 11, 2023.

[Cross-party MPs demand government backing for Clean Air Bill](#) H&V News This included particulate matter with a diameter equal to or smaller 2.5 microns (PM 2.5). The letter also highlighted the publication of findings ...

Cross-party group of MPs demands government backing for Clean Air Bill. September 11, 2023. Proposed legislation also known as 'Ella's Law' should form the basis of new requirements around monitoring and managing air quality in and around schools, open letter says. A cross-party group of over a dozen MPs have called on the government to enshrine a right to clean air into law as an urgent health priority. An open letter written by Green Party MP Caroline Lucas, which is also backed by representatives from Labour and the Conservative Party, has asked Environment Minister Thérèse Coffey to back proposed legislation within the Clean Air (Human Rights) Bill. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.**

RAWSEP View is that 5 points were made in this article about arguments in favor of the passage of Ella's Law

1) Caroline Lucas, United Kingdom Green Party Member of Parliament wrote the letter urging that the government support Ella's Law. Caroline Lucas' letter refers to students returning to school this fall, and school safety from PM2.5 threatening children's health, which would require important changes in the management of outdoor and indoor air within five years in England. She said that acting now was urgent, but Parliament has not yet acted in a way that reflects that urgency. What follows are excerpts from the news article.

Ms. Lucas said in her letter this month, "The toxic state of our air is threatening our children's health and their education. As students start the new school year, and we return to Parliament from the summer recess, we urge you to back the Clean Air (Human Rights) Bill." Ms. Lucas said passing the Bill into law would help to enshrine a public right to clean air. This would require important changes in the management of internal and external air within five years in England. She added: "The measures, which have been taken by your government to date, including setting new air quality targets under the Environment Act, do not reflect the urgency of the situation and the scale of harm, which is being done to our young people's health. We therefore urge you to take bold action and champion this Bill in Parliament."

2) Ms. Lucas cited research from 2021 that concluded that over one quarter of UK schools were based in areas where air pollution was exceeding World Health Organization guidelines for harmful pollutants. This included particulate matter with a diameter equal to or smaller than 2.5 micrometers (PM 2.5).

3) More than a dozen Members of Parliament, a cross-party group, (in America called a bipartisan group) support Ms. Lucas' letter.

4) Professor Chris Whitty United Kingdom Chief Medical Officer supported Ms. Lucas' letter. The letter also highlighted the publication of findings late last year from chief medical officer Professor Chris Whitty warning about the impacts of exposure to airborne pollution on children. Professor Whitty [at the time argued that decades of progress](#) in work to curb external air pollution must be matched with a similar push to tackle airborne contaminants in indoor environments.

5) Thérèse Coffey United Kingdom Environment Minister is who the letter from Mr. Lucas is addressed to.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates

The Bill [has gained approval from the House of Lords and sets out new requirements](#) around the management of both indoor and external air, with specific new requirements around monitoring in buildings. However, there is no guarantee at present that the proposals, which have been debated by MPs, will be put forward into law.

The Clean Air (Human Rights) Bill is also known as 'Ella's law'. The name relates to Ella Roberta Kissi-Debrah, a British schoolgirl who died in 2013. [A coroner ruled in 2020](#) that air pollution had directly contributed to the schoolgirl's death.

PM2.5 and breast cancer

[High levels of particulate air pollution associated with increased breast cancer incidence](#) National Institutes of Health (NIH)... such as wood smoke/vegetation burning, and industrial emissions. The particulate matter pollution measured in this study was 2.5 microns in diameter or smaller (PM2.5), meaning the particles are small enough to ...Monday, September 11, 2023. High levels of particulate air pollution associated with increased breast cancer incidence. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.**

NIH researchers combined historical air quality data with breast cancer data from large U.S. study. Researchers at the National Institutes of Health found that living in an area with high levels of particulate air pollution was associated with an increased incidence of breast cancer. The study, published in the Journal of the National Cancer Institute, is one of the largest studies to date looking at the relationship between outdoor air pollution, specifically fine particulate matter,

and breast cancer incidence. The research was done by scientists at the National Institute of Environmental Health Sciences (NIEHS) and the National Cancer Institute (NCI), both part of NIH. The researchers saw that the largest increases in breast cancer incidence was among women who on average had higher particulate matter levels (PM2.5) near their home prior to enrolling in the study, compared to those who lived in areas with lower levels of PM2.5. Particulate matter can come from wood smoke/vegetation burning, and industrial emissions. The particulate matter pollution measured in this study was 2.5 micrometers (PM2.5), meaning the particles are small enough to be inhaled deep into the lungs. The Environmental Protection Agency has a website known as [Air Now\(link is external\)](#) where residents can enter their zip code and get the air quality information, including PM2.5 levels, for their area. “We observed an 8% increase in breast cancer incidence for living in areas with higher PM2.5 exposure. Although this is a relatively modest increase, these findings are significant given that air pollution is a ubiquitous exposure that impacts almost everyone,” said the lead author and head of the Environment and Cancer Epidemiology Group at NIEHS. “These findings add to a growing body of literature suggesting that air pollution is related to breast cancer.” The study was conducted using information from the NIH-AARP Diet and Health Study, which enrolled more than 500,000 men and women between 1995-96 in six states (California, Florida, Pennsylvania, New Jersey, North Carolina, and Louisiana) and in two metropolitan areas (Atlanta and Detroit). The women in the cohort were on average about 62 years of age and most identified as being non-Hispanic white. They were followed for approximately 20 years, during which 15,870 breast cancer cases were identified. The researchers estimated annual average historical PM2.5 concentrations for each participant’s residence. They were particularly interested in air pollution exposures during a period of 10-15 years prior to enrollment in the study, given the length of time it takes for some cancers to develop. Most previous studies have assessed breast cancer risk in relation to air pollution around the time of study enrollment and did not consider past exposures. “The ability to consider historic air pollution levels is an important strength of this research,” said the senior author and principal investigator of the study at NCI. “It can take many years for breast cancer to develop and, in the past, air pollution levels tended to be higher, which may make previous exposure levels particularly relevant for cancer development.” To consider how the relationship between air pollution and breast cancer varied by the type of tumor, the researchers evaluated estrogen receptor-positive (ER+) and -negative (ER-) tumors separately. They found that PM2.5 was associated with a higher incidence of ER+ breast cancer, but not ER-, tumors. This suggests that PM2.5 may affect breast cancer through an underlying biologic pathway of endocrine disruption. ER+ tumors are the most common tumors diagnosed among women in the United States. The authors note that the study was limited in its ability to explore any differences in the relationship between air pollution and breast cancer across the different study areas. They suggest future work should explore how the regional differences in air pollution, including the various types of PM2.5 women that women are exposed to, could impact a woman’s risk of developing breast cancer. References. White AJ, Fisher JA, Sweeney MR, Freedman ND, Kaufman JD, Silverman DT, Jones RR. 2023. Ambient fine particulate matter and breast cancer incidence in a large prospective US cohort. Journal of the National Cancer Institute. [https://doi.org/10.1093/jnci/djad170\(link is external\)](https://doi.org/10.1093/jnci/djad170(link is external))

[Breast cancer incidence linked to high particulate air pollution - Earth.com](#) The focus of the research was on particulate matter of 2.5 microns in ... industrial releases, and even the burning of wood and vegetation.

[The Link Between Breast Cancer and Environmental Pollution - HealthNews](#) ... pollution related to fine particulate matter from industrial and wildfire smoke. ... wood smoke, burning vegetation, and industrial emissions.

[Air pollution linked to higher rates of breast cancer | Washington Examiner](#) The NIH study measured particulate matter 2.5 microns in size, ... data based on the type of breast cancer tumors, finding that PM2.5 exposure is ... RAWSEP View: This article needlessly denigrates PurpleAir PM2.5 monitors by saying that “Smoke estimates from satellites and low-cost portable sensors can help, but they work best when they can be cross-calibrated to a well-maintained network of high-accuracy monitors.” Low cost portable sensors or low cost PurpleAir PM2.5 stationary sensors work well enough to show if PM2.5 levels are at unsafe levels, and are put on AirNow Maps of Smoke and Fire alongside \$100,000 EPA monitors, calibrated with the EPA monitors with a simple mathematical formula. IF you look at the PurpleAir map (where PurpleAir monitors are not calibrated with EPA monitors) and AirNow PM2.5 monitor maps, you can see there is little difference in each of the two types of PM2.5 monitor maps and the circles on both maps are usually the same color, whether calibrated with EPA monitors or not. Refraining from wood burning, whether indoor residential wood burning or industrial biomass (wood) burning is not mentioned in this article, although that is one major way of mitigating air pollution that leads to climate change. The dip in PM2.5 pollution in United States statistics probably came from the phony counting of emission reduction statistics produced on paper not in reality from switching from coal burning to wood burning in industrial plants. The United States does not count wood burning CO2 and PM2.5 emissions and so the United States only counts coal burning CO2 and PM2.5 emission reductions when a coal plant is

shut down and replaced by a wood burning plant. Therefore it misleadingly appears there are lower net CO2 and PM2.5 reductions, when in reality wood burning that replaces coal burning produces more CO2 and PM2.5 than coal burning, and in reality wood burning emits 450 times the PM2.5 as natural gas burning.

United States, Midwest & Northeast Wildfire Smoke

[The summer of wildfire smoke was only the beginning | WOODTV.com](#) While Western states have contended with smoky fire seasons for years, the air quality alerts across the U.S. Midwest and Northeast this summer ...

The summer of wildfire smoke was only the beginning By a Professor of Chemical and Biochemical Engineering, University of Iowa, and a Professor of Environmental Health, at the University of Iowa. ([The Conversation](#)) – Canada's [seemingly endless wildfires](#) in 2023 introduced millions of people across North America to the health hazards of wildfire smoke. While Western states have contended with smoky fire seasons for years, the air quality alerts across the U.S. Midwest and Northeast this summer reached [levels never seen there before](#). The smoke left the air so unhealthy in Philadelphia on June 7, 2023, that a Baseball [game was postponed](#). That same week, New York City residents hunkered down indoors for several days as a smoky haze hung over the city, turning the skies orange and exposing millions of people to the worst air quality in the world. Smoke also drifted into the Midwest, triggering the highest air quality index levels in the Chicago area in at least 24 years, forcing the cancellation of numerous summer activities and leaving residents with raspy voices. In several states, people woke up to smoky skies day after day.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates Chicago was under air quality alerts several times during the summer of 2023 as wildfire smoke blew in from Canada. [our perspective as air quality scientists](#) The wildfire smoke of 2023 highlights an emerging air quality trend. The U.S. had seen [decades of falling levels](#) of fine particulate matter pollution, PM2.5, thanks to environmental regulations and cleaner engines, factories. and power plants. But wildfires' contribution to air pollution is increasing again, resulting in flat or rising levels of air pollution in much of the country. Computer simulations of the [future in a warming climate](#) show more smoky days, higher smoke concentrations, larger burned areas and higher emissions – which further [fuel climate change](#). Living with wildfire smoke may mean using air filtration devices, wearing N95 or KN95 masks on bad air days, modifying outdoor commuting patterns and activity schedules and changing household ventilation choices. Schools can start with [setting a threshold](#) for canceling outdoor activities and making sure staff are ready to meet the needs of kids with asthma. Selecting an air purifier [can be a daunting task](#). [how a mask fits](#) and whether exterior doors and windows seal tightly and whether filters are installed properly and are replaced often enough are important factors in preventing exposure to wood smoke. The U.S. has an extensive air quality monitoring and forecasting system to help provide some early warning. It uses ground-based air quality monitors. Smoke from wildfires in Canada was forecast across a large part of the U.S. on June 28, 2023. Dark purple dots indicate hazardous air quality; red is unhealthy; orange is unhealthy for sensitive groups; and yellow indicates moderate risk. [AirNow.gov](#) Satellite data tracks black carbon from wildfire smoke moving into the U.S. Northeast, June 3-8, 2023. [NASA Earth Observatory video by Lauren Dauphin](#) Maintaining a strong air quality monitoring network is also important. State and local government agencies have reduced the [number of ground monitors by about 10%](#) from its peak in 2001. Smoke estimates from satellites and low-cost portable sensors can help, but they work best when they can be cross-calibrated to a well-maintained network of high-accuracy monitors.

India, Delhi

[Delhi govt bans firecracker licenses, manufacturing ahead of Diwali - Punjab News Express](#) However, in October, as winter advances, particulate matter (PM) begins to accumulate, ... PM 2.5 has also decreased by 46 per cent.

[India's capital renews firecracker ban to combat pollution - Reuters](#) ... World Health Organization's guideline to limit levels of lung-damaging airborne particles, known as PM 2.5, to 5 micrograms per cubic metre.

[Year's first 'good air' day, thanks to rain & G20 curbs - The Times of India](#) The average PM 2.5 concentration on September 8 and 9 was about 15 g/m³ which is the lowest in the past eight years."

India, Delhi [Barka, Haryana Weather Forecast and Conditions - The Weather Channel](#) Pollution. Delhi's PM 10 and PM 2.5 Levels Drop by Over 40% in Nine Years; Focus Shifts to Winter Pollution Action Plan.

A letter sent on 8/28/2023 to the Assistant Attorney Generals threatening to sue the EPA over wood stove certification follows.

Dear Assistant Attorney General,

Attached is a letter that was sent to the National Institute of Allergy and Infectious Diseases (NIAID) Director Dr. Jeanne Marrazzo, former acting NIAID Director Dr. Hugh Auchincloss and National Institutes of Health (NIH) Director Dr. Lawrence Tabak regarding regulation and the ability to shutdown PM2.5 polluting indoor residential wood burners. PM2.5 pollution is known to cause antibiotic resistance making infectious disease pandemics more likely and

uncontrollable.

The letter asks Dr. Marrazzo to apply a "Parallel Track" to indoor residential wood burning pollution in 2023. This "Parallel Track" would include both EPA wood stove certification and a complaint-based system using PurpleAir PM2.5 monitor data collected from the yards of near neighbors of indoor residential wood burners. This would be a way to address the very real impact of PM2.5 pollution which EPA wood stove certification fails to address. We propose that the use of PurpleAir monitors would provide important data on PM2.5 air pollution that is currently missing in the EPA wood stove certification.

This proposal is modeled on the approach Dr. Anthony Fauci used in 1989 that allowed a "Parallel Track" of both the Food and Drug Administration (FDA) use of AZT for AIDS that had the unfortunate side effect of blindness along with a second drug, Ganciclovir, that actually cured the blindness.

An earlier letter sent to your office asked that you include a complaint-based system of regulating indoor residential wood burning using PurpleAir PM2.5 data in your suit against the EPA. Indoor residential wood burners are already ineffectively certified by the EPA. This violates the EPA's own National Ambient Air Quality Standards (NAAQS) emission limits of 35 micrograms per cubic meter in a 24-hour period. Using data from PurpleAir PM2.5 monitors in the yards of near neighbors who complain of PM2.5 from hyper-localized indoor residential wood burners would provide the missing and important evidence of this type of air pollution.

Currently if a near neighbor's complaint is made to a local health department, a complaint using federal NAAQS exceedance data is not considered as a basis for a complaint against neighboring indoor residential wood burning. It is also not considered as a basis for shutting down the wood burning appliance when the indoor residential wood stove has been federally EPA certified. Lawsuits for nuisance are expensive and beyond the means of the average American and are not considered precedents in courts generally. Contacting state agencies to shut down polluting wood stove use that affects the health and lives of near neighbors has been unproductive because decisions made by the EPA determine the decisions made by state agencies.

Although the scope of your lawsuit seems confined to asking the EPA to continue their wood stove certification program as is, albeit at a faster pace, we ask that you consider the intent behind asking the EPA to tighten their standards for wood stove certification on a regular basis. The intent of an Environmental Protection Agency is to protect the environment. This has perhaps been narrowly construed to be protecting air, water and ground from contamination from industries only. But United States citizens should actually benefit from this environmental protection as well. Tightening wood stove standards on a regular basis should result in protecting the environment as well as protecting United States citizens from harm from the air, water, and ground. We believe that the EPA's responsibilities are inextricably connected with public health responsibilities of other government agencies such as NIAID.

Please try to accomplish something meaningful for the American people with this lawsuit by considering using a Parallel Track to include PM2.5 data in future decisions about air quality standards. Although I am not your constituent, by commencing to sue a federal agency you are representing me as a citizen of the United States and in that sense as your constituent. Thank you, Sent to

cody.doig@alaska.gov Alaska Senior Assistant Attorney General Cody Doig

Jason.james@ilag.gov Illinois Assistant Attorney General Jason James

Sgoldstein@oag.state.md.us Maryland Special Assistant Attorney General Steven Goldstein

Turner.Smith@mass.gov Massachusetts Assistant Attorney General Turner Smith

Peter.Surdo@ag.state.mn.us Minnesota Special Assistant Attorney General Peter Surdo

Lisa.Morelli@law.njoag.gov New Jersey Deputy Attorney General Lisa Morelli

Nicholas.Buttino@ag.ny.gov New York Assistant Attorney General Nicholas Buttino

Paul.Garrahan@doj.state.or.us Oregon Attorney-in-Charge Paul Garrahan

Steve.Novick@doj.state.or.us Oregon Special Assistant Attorney General Steve Novick

Nick.persampieri@vermont.gov Vermont Assistant Attorney General Nick Persampieri

Caroline.cress@atg.wa.gov Washington Assistant Attorney General Caroline Cress

Chris.reitz@atg.wa.gov Washington Assistant Attorney General Chris Reitz

Jenniferd@pscleanair.gov General Counsel, Puget Sound Clean Air Agency Jennifer A. Dold

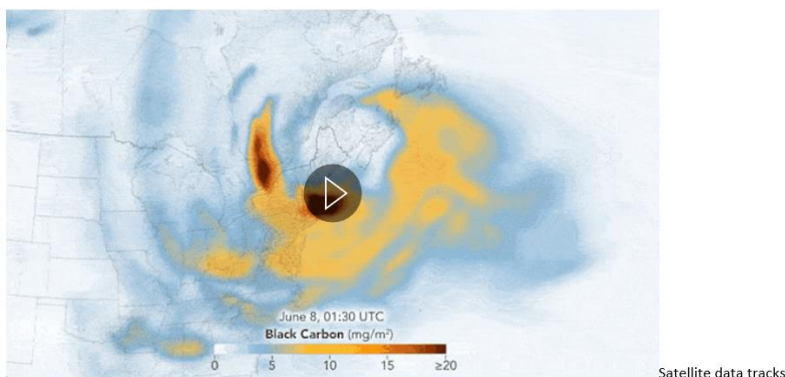
Jeanne.marrazzo@nih.gov Director of National Institute of Allergy and Infectious Diseases Jeanne Marrazzo

Hugh.Auchincloss@nih.gov January to July 2023 acting Director of National Institute of Allergy and Infectious Diseases
Hugh Auchincloss

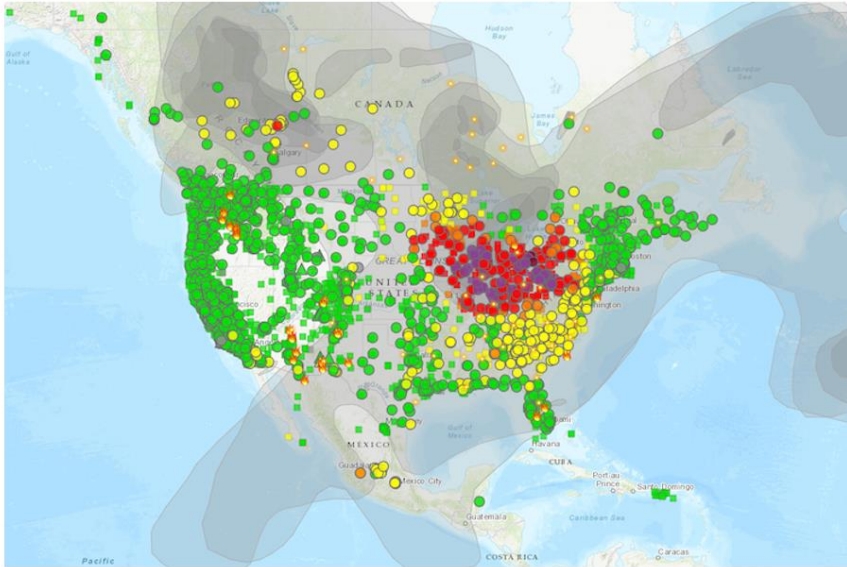
Lawrence.Tabak@nih.gov Director of the National Institutes of Health Lawrence Tabak

<https://rawsepresidents.wordpress.com/1-please-attach-pdf-letter-to-niaid-director-dr-jeanne-marrazzo-to-an-email-from-you-to-jeanne-marrazonih-gov/>

Episode 56GF July 19, 2023. The Ask: Request a complaint-based system from 10 Attorney Generals suing the E P A to give wood stove users “certainty”. The Ask: Emails of 3 NIH officials jeanne.marrazzo@nih.gov; hugh.auchincloss@nih.gov; Lawrence.tabak@nih.gov Emails of 13 Assistant Attorney Generals, Deputy Attorney Generals and General Counsel preparing to sue the EPA to provide clarity for indoor residential wood stove manufacturers, vendors, and users. Instead, the assistant attorneys general should ask for a PM2.5 pollution complaint based system in place of the failed wood stove certification program. The states involved are Alaska, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, New York, Oregon, Vermont, and Washington, as well as the Puget Sound Clean Air Agency. A new icon has been added to the RAWSEPresidents Website, which is now the nearest right icon. The icon is an ask that has already been described in Episode 56G B (description of the parties who should be at the table when deciding on “safe” wood stove emission limits and fence line measurements, rather than wood stove certification) and (emails to contact 10 Deputy or Assistant Attorney Generals and one General Counsel) (those PDFs are included at the icon link). Residents Against Wood Smoke Emission Particulates, see <https://rawsepresidents.wordpress.com> and click on the nearest right icon for The Ask: 1)Email PDF letters to 3 officials of the National Institutes of Health (NIH) and NIAID <https://rawsepresidents.wordpress.com/1-please-attach-pdf-letter-to-niaid-director-dr-jeanne-marrazzo-to-an-email-from-you-to-jeanne-marrazonih-gov/> The Ask 2)Email PDF letters to 13 Assistant Attorneys Generals, Deputy Attorney Generals and General Counsel <https://rawsepresidents.wordpress.com/1-please-contact-10-attorneys-general-about-august-2023-suit-versus-e-p-a-asking-for-certainty-for-wood-stove-users-rawsep-asks-for-complaint-based-sytem-based-on-pm2-5-monitor-data-exceeding-e-p/> To the right of that 3)“Barbie Goes To The Dating Game” <https://rawsepresidents.wordpress.com/1-barbie-goes-to-the-dating-game/> To the right of that 4)“Cookies that may contain Rocks are recalled” <https://rawsepresidents.wordpress.com/cookies-that-may-contain-rocks-are-recalled/> to the right of that 5)“The Fox Owns the Forest” card game <https://rawsepresidents.wordpress.com/the-fox-owns-the-forest-card-game-tba/> then to the right of that, the latest months, 6)September & 7)August & 8)July 2023, of PDFs of articles with U R L’s to search on <https://rawsepresidents.wordpress.com/1-september-2023-pdfs-of-urls/> <https://rawsepresidents.wordpress.com/1-august-2023-pdfs-of-urls/> and <https://rawsepresidents.wordpress.com/1-july-2023-pdfs-of-urls/> To the right of that, 9)Stickers to handout for RAWSEP, 10) Flyers to handout for RAWSEP, Games such as 11)Bingo for RAWSEP, 12)Crosswords for RAWSEP 13)PM2.5JeopardyFree game <https://youtu.be/Lnsg32pYDnc> 14)PM2.5FreeMonopoly <https://youtu.be/cUJCK1pscQnQ> & EndWoodSmokeMonopoly 9e)“Vending Machines for PM2.5 monitors”, and 15)icon links to 30 minute Youtube videos and Spotify podcasts as well as podcasts.google.com, Castbox and PocketCast. PocketCast is only Free on the phone App. Pocket Cast works on Apple phones) and, below those icons, icon links to monthly URL’s of PDFs from June 2023 to May 2022.



black carbon from wildfire smoke moving into the U.S. Northeast, June 3-8, 2023. [NASA Earth Observatory video by Lauren Dauphin](#)



Smoke from wildfires in Canada was forecast across a large part of the U.S. on June 28, 2023. Dark purple dots indicate hazardous air quality; red is unhealthy; orange is unhealthy for sensitive groups; and yellow indicates moderate risk. [AirNow.gov](https://www.airnow.gov)



A person waiting for the subway wears a filtered mask as smoky haze from wildfires in Canada blankets a neighborhood on June 7, [2023](https://www.nytimes.com/2023/06/07/us/politics/wildfire-smoke-new-york.html) in the Bronx borough of New York City. New York topped the list of most polluted major cities in the world on Tuesday night, as smoke from the fires continues to blanket the East Coast.

To prepare, read up on the risks and warning signs from public health professionals. Living with wildfire smoke may mean using air filtration devices, wearing N95 or KN95 masks on bad [air](https://www.airnow.gov) days, modifying outdoor commuting patterns and activity schedules and changing household ventilation choices.